Liberica JDK 8u412+9
Release Notes

bell/soft

Contents

1. Introduction

This document provides the late-breaking information about Liberica JDK 8u412 release.

The full version string for this update release is 8u412+9. The version number is 8.

2. Liberica JDK 8u412+9

Liberica is a certified, Java SE 8-compliant distribution of OpenJDK 8, which works on server (Linux x86_64, Linux ARM64, Windows 64), desktop (Windows 64, Mac, Linux x86_64), and embedded devices (Linux ARM64, Linux ARMv7, including Raspberry Pi 2 & 3 (ARMv6 hardfloat)). It has the following notable additions:

- Linux x86_64 version contains support for ZGC.

- Linux x86_64, ARMv8 and ARMv7 distributions include a choice of Client VM, Server VM and Minimal VM.

- Alpine Linux x86_64 and aarch64 are built with musl support.

- Windows x86_64, Windows ARMv8, Mac, Linux x86_64, and Linux ARMv7 distributions contain OpenJFX 8.

- Linux ARMv7 distribution contains Device IO API compiled for Raspberry Pi.

Refer to the Oracle JDK 8u412 release notes for further information on JDK 8 features. This document further outlines the peculiarities of Liberica distribution as compared to Oracle JDK 8 distribution.

3. Liberica JDK 8 distribution

Liberica JDK 8 is distributed as .rpm, .zip, .deb and .tar.gz packages. Please select the most appropriate for your purposes.

Liberica JDK 8 introduced all [new features](#) supported by OpenJDK 8.

With the introduction of the Jigsaw feature in JDK 9 and Minimal VM it is now possible to create a Runtime that is sufficient to run your application and trim down the size of the Runtime. To generate a Runtime with just the Minimal VM, add `--vm=minimal` to jlink options.

By default, the Liberica uses Server VM. Server VM and Client VM can be enabled with `-server` and `-client` command line options, respectively. In case the deployment requires minimizing the footprint, it may be beneficial to use Minimal VM, which emphasis is a minimal footprint. It has C1 JIT compiler only, Serial GC and no serviceability features.

4. Security Baselines

BellSoft Liberica follows the security baselines for Oracle Java SE. Please refer to the Oracle documentation for a list of issues fixed in a given release.

5. Known Issues

This release does not contain any known issues.

6. CVEs

This is the list of the security issues fixed in this release. CVSS scores are provided using the CVSS version 3.1 scoring system.

CVE ID	CVSS score	Component	Module	Attack Vector	Complexity	Privileges	User Interaction	Scope	Confidentiality	Integrity	Availability
CVE-2023-41993	7.5	javafx	web	network	high	none	required	unchanged	high	high	high
CVE-2024-21002	2.5	javafx	graphics	local	high	none	required	unchanged	none	low	none
CVE-2024-21003	3.1	javafx	graphics	network	high	none	required	unchanged	none	low	none
CVE-2024-21004	2.5	javafx	window-toolkit	local	high	none	required	unchanged	none	low	none
CVE-2024-21005	3.1	javafx	graphics	network	high	none	required	unchanged	none	low	none
CVE-2024-21011	3.7	hotspot	runtime	network	high	none	none	unchanged	none	none	low
CVE-2024-21068	3.7	hotspot	compiler	network	high	none	none	unchanged	none	low	none
CVE-2024-21085	3.7	core-libs	java.util	network	high	none	none	unchanged	none	none	low
CVE-2024-21094	3.7	hotspot	compiler	network	high	none	none	unchanged	none	low	none

7. Notable Issues

This is the list of the notable issues fixed in this release.

Issue ID	
JDK-8321717	Summary: Add Telia Root CA v2 Description: Telia root certificate was added.
JDK-8321804	Summary: Add Let's Encrypt ISRG Root X2 Description: New Let's Encrypt root certificates were added.
JDK-8321813	Summary: Add four DigiCert root certificates Description: Four new DigiCert root certificates were added.
JDK-8325961	Summary: rcache interop with krb5-1.15 Description: Java's DFL-style rcache uses MD5 hash, which is the same as krb5-1.14 and earlier. krb5-1.15 uses SHA256. If the same AP-REQ was sent to krb5-1.15 first (which created a new rcache entry) and then sent to a Java acceptor, Java could not find a match in the rcache file and accepted it.
JDK-8327570	Summary: Test 'api/java_awt/interactive/SystemTrayTests.html' failed because A blue ball icon is added outside of the system tray Description: When pressing the 'Add tray icon' button, the blue ball icon is now added to the system tray.
JDK-8328838	Summary: Add Certainly roots R1 and E1 Description: Certainly Root R1 CA certificate was added.

8. Resolved Issues

JDK issues

This is the list of general JDK issues fixed in this release.

Issue ID	Summary
JDK-8011180	Delete obsolete scripts
JDK-8016451	Scary messages emitted by build.tools.generatenimbus.PainterGenerator during build
JDK-8021961	setAlwaysOnTop doesn't behave correctly in Linux/Solaris under certain scenarios
JDK-8023735	[TESTBUG] [macosx] runtime/XCheckJniJsig/XCheckJSig.java fails on MacOS X
JDK-8074860	Structured Exception Catcher missing around CreateJavaVM on Windows
JDK-8079441	Intermittent failures on Windows with "Unexpected exit from test [exit code: 1080890248]" (0x406d1388)
JDK-8155590	Dubious collection management in sun.net.www.http.KeepAliveCache
JDK-8168518	rcache interop with krb5-1.15
JDK-8183503	Update hotspot tests to allow for unique test classes directory
JDK-8186095	upgrade to jtreg 4.2 b08
JDK-8186199	[windows] JNI_DestroyJavaVM not covered by SEH

Issue ID	Summary
JDK-8192931	Regression test java/awt/font/TextLayout/CombiningPerf.java fails
JDK-8208655	use JTreg skipped status in hotspot tests
JDK-8208701	Fix for JDK-8208655 causes test failures in CI tier1
JDK-8208706	compiler/tiered/ConstantGettersTransitionsTest.java fails to compile
JDK-8213410	UseCompressedOops requirement check fails fails on 32-bit system
JDK-8222323	ChildAlwaysOnTopTest.java fails with "RuntimeException: Failed to unset alwaysOnTop"
JDK-8224768	Test ActalisCA.java fails
JDK-8251155	HostIdentifier fails to canonicalize hostnames starting with digits
JDK-8251551	Use .md filename extension for README
JDK-8268678	LetsEncryptCA.java test fails as Let's Encrypt Authority X3 is retired
JDK-8270280	security/infra/java/security/cert/CertPathValidator/certification/LetsEncryptCA.java OCSP response error
JDK-8270517	Add Zero support for LoongArch
JDK-8272708	[Test]: Cleanup: test/jdk/security/infra/java/security/cert/CertPathValidator/certification/BuypassCA.java no longer needs ocspEnabled
JDK-8276139	TestJpsHostName.java not reliable, better to expand HostIdentifierCreate.java test
JDK-8288132	Update test artifacts in QuoVadis CA interop tests

Issue ID	Summary
JDK-8297955	LDAP CertStore should use LdapName and not String for DNs
JDK-8301310	The SendRawSysexMessage test may cause a JVM crash
JDK-8302017	Allocate BadPaddingException only if it will be thrown
JDK-8308592	Framework for CA interoperability testing
JDK-8312126	NullPointerException in CertStore.getCRLs after 8297955
JDK-8315042	NPE in PKCS7.parseOldSignedData
JDK-8315757	[8u] Add cacerts JTREG tests to GHA tier1 test set
JDK-8317373	Add Telia Root CA v2
JDK-8317374	Add Let's Encrypt ISRG Root X2
JDK-8317507	C2 compilation fails with "Exceeded _node_regs array"
JDK-8318340	Improve RSA key implementations
JDK-8318759	Add four DigiCert root certificates
JDK-8319187	Add three eMudhra emSign roots
JDK-8319851	Improve exception logging
JDK-8320597	RSA signature verification fails on signed data that does not encode params correctly
JDK-8320713	Bump update version of OpenJDK: 8u412

Issue ID	Summary
JDK-8321060	[8u] hotspot needs to recognise VS2022
JDK-8321408	Add Certainly roots R1 and E1
JDK-8322114	Improve Pack 200 handling
JDK-8322122	Enhance generation of addresses
JDK-8322725	(tz) Update Timezone Data to 2023d
JDK-8322750	Test "api/java_awt/interactive/SystemTrayTests.html" failed because A blue ball icon is added outside of the system tray
JDK-8323202	[8u] Remove get_source.sh and hgforest.sh
JDK-8323640	[TESTBUG]testMemoryFailCount in jdk/internal/platform/docker/TestDockerMemoryMetrics.java always fail because OOM killed
JDK-8324184	Windows VS2010 build failed with "error C2275: 'int64_t'"
JDK-8324530	Build error with gcc 10
JDK-8325150	(tz) Update Timezone Data to 2024a

JFX issues

This is the list of JFX issues fixed in this release.

Issue ID	Summary
JDK-8221261	Deadlock on macOS in JFXPanel app when handling IME calls
JDK-8309374	Accessibility Focus Rectangle on ListItem is not drawn when ListView is shown for first time
JDK-8311492	FontSmoothingType LCD produces wrong color when transparency is used
JDK-8313032	Enhanced handling of Glass
JDK-8313040	Enhanced Font handling
JDK-8313064	General enhancements of image handling
JDK-8313072	Enhanced handling of Fonts
JDK-8318386	Update Glib to 2.78.1
JDK-8318387	Update GStreamer to 1.22.6
JDK-8318388	Update libxslt to 1.1.39
JDK-8318614	Update WebKit to 617.1
JDK-8318984	Update to Xcode 14.3.1 on macOS
JDK-8319079	Missing range checks in decora
JDK-8319669	[macos14] Running any JavaFX app prints Secure coding warning
JDK-8319762	Update to Visual Studio 2022 version 17.6.5 on Windows
JDK-8319996	Update to GCC 13.2.0 on Linux

Issue ID	Summary
JDK-8320260	WebView: Update Public Suffix List to b5bf572
JDK-8320267	WebView crashes on macOS 11 with WebKit 616.1
JDK-8322236	Build failure after JDK-8313064
JDK-8322703	Intermittent crash in WebView in a JFXPanel from IME calls on macOS
JDK-8323879	constructor Path(Path) which takes another Path object fail to draw on canvas html
JDK-8323880	Caret rendered at wrong position in case of a click event on RTL text
JDK-8324337	Cherry-pick WebKit 617.1 stabilization fixes
JDK-8325258	Additional WebKit 617.1 fixes from WebKitGTK 2.42.5
JDK-8326989	Text selection issues on WebView after WebKit 617.1

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